

We claim:

1. A method of reading data on an optical disc having a first side and a second side, each side including a lead-in and a lead-out area, comprising:
rotating the disc; and
reading data from the lead-in area of said first side to the lead-out area of said first side; and
reading data from the lead-in area of said second side to the lead-out area of said first second side, without stopping the disc.
2. The method of claim 1 wherein the disc has a hub and a periphery and each side has a top layer and a bottom layer and a middle area, further comprising reading data with a laser head and refocusing said laser head in said middle area between said top and said bottom layers.
3. The method of claim 2 wherein said lead-in area and lead-out area are disposed at the hub.
4. The method of claim 2 wherein said lead-in area and lead-out area are disposed at said periphery.
5. The method of claim 2 wherein said lead-in area is on said top layer and said lead-out area is on said bottom layer.

6. The method of claim 2 wherein said lead-in area is on said bottom layer and said lead-out area is on said top layer.

7. The method of claim 2 wherein the lead-in area on one side is on the top layer and the lead in area on the other side is on the bottom layer.

8. A method of reading data from an optical disc comprising:
providing an optical disc with a hub and a periphery, a first side and a second side, each side having a top layer and a bottom layer and lead-in area, a lead-out area and a middle area;
reading data from said first side from said lead-in to said lead-out area;
switching to said second side without turning the disc over; and
reading data from said second side from said lead-in to said lead-out area.

9. The method of claim 8 further comprising reading data with a reading head and refocusing said reading head at said middle area to switch between said top and bottom layers.

10. The method of claim 9 further comprising reading the top layer before reading the bottom layer.

11. The method of claim 9 further comprising reading the bottom layer

before reading the top layer.

12. The method of claim 9 further comprising reading the top layer on the first side and reading the bottom layer on the second side.

13. A method of reading data from an optical disc comprising:

providing an optical disc with a hub and a periphery, a first side and a second side, said top side having a top layer A0 and a bottom layer A1 and said second side having a top layer B0 and a bottom layer B1 and lead-in area, a lead-out area and a middle area;

reading data from said first side;

switching to said second side without turning the disc over; and

reading data from said second side.

14. The method of claim 13 further comprising reading data from the layers in the sequence A0-A1-B1-B0.

15. The method of claim 13 further comprising reading data from the layers in the sequence A1-A0-B1-B0.

16. The method of claim 13 further comprising reading data from the layers in the sequence A1-A0-B1-B0.

17. The method of claim 13 further comprising reading data from the layers in the sequence A1-A0-B0-B1.

18. The method of claim 13 further comprising reading data from the layers in the sequence A0-A1-B-B0.

19. The method of claim 13 further comprising reading data from the layers in the sequence A0-B0-B1-A1.

20. The method of claim 13 further comprising reading data from a lead-in area disposed at the hub to a lead-out area disposed at the hub.

21. The method of claim 13 further comprising reading data from a lead-in area disposed at the periphery to a lead-out area disposed at the periphery.

22. The method of claim 13 further comprising reading data from said first side using a first laser head and reading data from said second side using a second laser head.

23. The method of claim 22 further comprising reading data from the layers in the sequence A0-A1-B0-B1.

24. The method of claim 22 further comprising reading data from the layers in the sequence A0-B0-A1-B1.

25. The method of claim 13 further comprising reading data from said first side using a laser head, switching said laser head to the second side.

26. The method of claim 25 further comprising switching said laser head from one side to another without stopping the rotation of the disc.